





## Grade level

Intermediate (3-6)

# Subjects

Math, social studies

# **Teaching Time**

Week 1: 45 min. Week 2: 30 min.

#### Skills

Gathering, interpreting, and applying data, math.

### Materials

Ten empty paper bags, rubber gloves, weight scale (optional), and copies of "Be a Garbage Gumshoe" investigation activity sheet (see back).

#### **OBJECTIVES**

Students will become aware of what they put into the waste stream and how they can change their habits. Students will be encouraged to improve their recycling habits by conducting a garbage and recyclables audit.

#### **PROCEDURE**

1. First Week

Students will set up two containers: one for garbage and one for recycling. (In order to make measuring the contents easy and uniform, students can place paper grocery bags in the garbage and recycling container.) At the end of each day students will estimate the volume (bags are 1/2 full, 1/4 full, 3/4 full, etc.) and/or measure the weight (using a scale) of both recycling and garbage and record the figures on the "Be a Garbage Gumshoe" chart.

- 2. Students will check their containers for "contamination." Record on the chart the total number of items that were incorrectly placed in the recycling, and the total number of items that were incorrectly placed in the garbage.
- 3. At the end of the week, tally up the total volume and/or weight of recyclables and garbage, and the number of incorrectly placed items for the first week. Ask:
  - How much of each did the students generate?
  - What could be done to decrease the amount of garbage?
  - What could be done to create less waste in the first place by reducing and by reusing?
  - What can be done to decrease the amount of incorrectly placed items?

#### 4. Second Week

Follow the identical process as described in week 1. Tally all results on the second part of the chart.

- Ask how week 2 compared to week 1. Explain the differences.
- Discuss again what could be done to reduce and reuse further.
- 5. Encourage students to conduct waste audits at home. Pass out copies of the "Be a Garbage Gumshoe" chart for them to use at home!

## PRE & POST DISCUSSIONS QUESTIONS

- How can you and your family change habits to reduce the amount you throw away?
- What types of products should we buy if we want to cut down on waste?



# Be a Garbage Gumshoe ACTIVITY SHEET

FIRST WEEK	amount of recyclables		amount of garbage		number of incorrect
da	volume	weight	volume	weight	items
Monday	bags	lbs.	bags	lbs.	
Tuesday	bags	lbs.	bags	lbs.	
Wednesday	bags	lbs.	bags	lbs.	
Thursday	bags	lbs.	bags	lbs.	
Friday	bags	lbs.	bags	lbs.	
TOTALS	bags	lbs.	bags	lbs.	

SECOND WEEK	amount of recyclables		amount of garbage		number of
te					incorrect
dates	volume	weight	volume	weight	items
Monday	bags	lbs.	bags	lbs.	
Tuesday	bags	lbs.	bags	lbs.	
Wednesday	bags	lbs.	bags	lbs.	
Thursday	bags	lbs.	ba <i>gs</i>	lbs.	
Friday	bags	lbs.	ba <i>gs</i>	lbs.	
TOTALS	bags	lbs.	bags	lbs.	

**Directions:** Each day add up all the garbage and all the recyclables that were thrown away. At the end of the week add it all up. Compare this week to another week when you keep track again. Compare the totals to see if you improved. Do this at home!!